WHAT IS CLAIMED IS:

1. A photoimagable polymer cured by a photocationic initiator, said polymer comprising a mixture of a polyfunctional epoxy resin and the condensation product of a bisphenol and an epihalohydrin, said polymer having a glass transition temperature of at least about 140° C and a fatigue life of at least about 10,000 cycles when measured at about a 3% strain.

2. The polymer according to claim 1 wherein the polyfunctional epoxy resin comprises the triglycidyl ether of tris (hydroxy phenyl), and the condensation product of the bisphenol, and the epihalohydrin comprises a diglycidyl ether of bisphenol A.

3. The polymer according to claim 2 wherein the photocationic initiator is selected from the group consisting of a sulfonium compound, an iodonium compound and a ferrocenium-type compound.

4. The polymer according to claim 3 wherein the photocationic initiator is triphenyl sulfonium and is used in the resin mixture in an amount of between about 0.5 and about 15 parts per 100 parts by weight of resin mixture (PHR).

5. The polymer according to claim 2 wherein the polyfunctional epoxy comprises between about 30 parts and about 70 parts per 100 parts by weight of the resin mixture, and the condensation product comprises between about 70 parts and about 30 parts by weight per 100 parts of the resin mixture.

6. The polymer according to claim 1 further including less than 10 parts of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C.

7. The polymer according to claim 6 wherein the third epoxy resin is selected from the group consisting of an epoxidied phenolformaldehyde novolac having a weight per epoxide between about 172 and about 179 and a diglycidyl ether of bisphenol A having a weight per epoxide between about 600 and about 950.

8. A photoimagable dielectric polymeric film having a flex fatigue resistance of at least about 10,000 cycles at about a 3% strain, and a glass transition temperature of at least about 140° C.

9. The polymeric film according to claim 8 comprising a mixture of

a) a polyfunctional epoxy resin having more than two epoxy groups and

b) the condensation product of a bisphenol and an epihalohydrin,

the mixture cured by an effective amount of a cationic photoinitiator.

10. The polymeric film according to claim 9 wherein the polyfunctional epoxy resin comprises the triglycidyl ether of tris (hydroxy phenyl) and the condensation product of the bisphenol, and epihalohydrin comprises a diglycidyl ether of bisphenol A.

11. The polymeric film according to claim 9 wherein the photocationic initiator is a sulfonium compound, and is used in the resin mixture in an amount of between about 0.5 and about 15 PHR.

12. The polymeric film according to claim 10 wherein the polyfunctional epoxy comprises between about 30 parts and about 70 parts by weight per 100 parts of the resin mixture, and the condensation product comprises between about 70 parts and about 30 parts by weight per 100 parts of the resin mixture.

13. The polymeric film according to claim 9 further including less than 10 parts of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C.

14. The polymeric film according to claim 13 wherein the third epoxy resin is selected from the group consisting of an epoxidied phenolformaldehyde novolac having a weight per epoxide between about 172 and about 179 and a diglycidyl ether of bisphenol A having a weight per epoxide between about 600 and about 950.

15. A build-up circuit package comprising a polymer prepared from a mixture of

(a) a polyfunctional epoxy resin having more than two epoxy groups, and

(b) the condensation product of a bisphenol and an epihalohydrin,

the mixture cured by an effective amount of a cationic photoinitiator, the polymer having a glass transition temperature of at least about 140° C and a fatigue life of at least about 10,000 cycles when measured at about a 3% strain.

16. The circuit package according to claim 15 wherein the polyfunctional epoxy resin comprises the triglycidyl ether of tris (hydroxy phenyl) and the condensation product of the bisphenol, and epihalohydrin comprises a diglycidyl ether of a bisphenol A.

17. The package according to claim 15 wherein the photocationic initiator is a sulfonium compound and is used in the resin mixture in an amount of between about 0.5 and about 15 PHR.

18. The package according to claim 16 further including less than 10 parts of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C.

19. The package according to claim 18 wherein the third epoxy resin is selected from the group consisting of an epoxidied phenolformaldehyde novolac having a weight per epoxide between about 172 and about 179 and a diglycidyl ether of bisphenol A having a weight per epoxide between about 600 and about 950.

20. A photoimagable dielectric polymer having a flex fatigue resistance of at least about 10,000 cycles at about a 3% strain, and a glass

transition temperature of at least about 140° C, the polymer comprising, based on 100 parts by weight of the reaction product, between about 30 parts and about 70 parts by weight of a polyfunctional epoxy resin comprising the triglycidyl ether of tris (hydroxy phenyl) and between about 70 parts and about 30 parts by weight of the condensation product of diglycidyl ether of a bisphenol A, said polymer optionally including up to 10 parts of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C, wherein the third epoxy resin is selected from the group consisting of an epoxidied phenolformaldehyde novolac having a weight per epoxide between about 172 and about 179 and a diglycidyl ether of bisphenol A having a weight per epoxide between about 600 and about 950, said reaction product cured with an effective amount of triphenyl sulfonium as a cationic photoinitiator.

21. The process of making a photoimagable dielectric comprising the steps of

(a) preparing a mixture of a polyfunctional epoxy resin and the condensation product of a bisphenol and an epihalohydrin,

(b) incorporating an effective amount of a cationic photoinitiator into the mixture,

(c) exposing at least a portion of the mixture to a source of actinic radiation, and

d) further processing the resin mixture using heat or other means to crosslink the exposed portion of resin mixture.

22. The process according to claim 21 wherein the polyfunctional epoxy resin comprises the triglycidyl ether of tris (hydroxy phenyl), and the condensation product of the bisphenol and epihalohydrin comprises a diglycidyl ether of a bisphenol A.

23. The process according to claim 21 wherein the photocationic initiator is a sulfonium compound, and is used in the mixture in an amount of between about 0.5 and about 15 PHR.

24. The process according to claim 21 comprising incorporating into the mixture up to 10 PHR of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C.

25. The process according to claim 24 wherein the third epoxy resin is selected from the group consisting of an epoxidied phenolformaldehyde novolac having a weight per epoxide between about 172 and about 179

and a diglycidyl ether of bisphenol A having a weight per epoxide between about 600 and about 950.

26. The process according to claim 21 wherein the portion of the resin mixture is exposed to actinic radiation through a pattern.

27. The process according to claim 26 wherein the resin mixture is further processed in step d) by 1) subjecting the mixture to heat to at least partially cure the exposed portion of the material, 2) removing unexposed material, 3) exposing the partially cured mixture to actinic radiation a second time, and 4) heating to fully cure the mixture to form a polymer.

28. The process of using a photoimagable polymer comprising:

a) preparing a resin mixture of a polyfunctional epoxy resin having more than two epoxy groups and the condensation product of a bisphenol and an epihalohydrin, wherein the polyfunctional epoxy comprises between about 30 parts and about 70 parts by weight per 100 parts of the resin mixture, and the condensation product comprises between about 70 parts and about 30 parts by weight per 100 parts of the resin mixture.

b) incorporating an effective amount of a cationic photoinitiator into the mixture,

c) applying the mixture to an electronic substrate to form a layer thereupon, and

d) exposing the at least a portion of the layer to a source of actinic radiation to cure the polymer.

29. The process according to claim 28 wherein the polyfunctional epoxy resin comprises the triglycidyl ether of tris (hydroxy phenyl) and the condensation product of the bisphenol and epihalohydrin comprises a diglycidyl ether of a bisphenol A.

30. The process according to claim 28 wherein the cationic photoinitiator is selected from the group consisting of a sulfonium compound, an iodonium compound and a ferrocenium-type compound.

31. The process according to claim 28 further including incorporating into the mixture up to 10 PHR of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C.

32. The process of making a photoimagable dielectric having a flex fatigue life of at least about 10,000 cycles at about a 3% strain, and a glass transition temperature of at least about 140° C, comprising the steps of

a) based on 100 parts by weight of a resin mixture, preparing a mixture of between about 30 parts and about 70 parts of a polyfunctional epoxy resin comprising the triglycidyl ether of tris (hydroxy phenyl) and between about 70 parts and about 30 of a diglycidyl ether of bisphenol A and optionally including the addition to the resin mixture of up to 10 parts of a third epoxy resin capable of improving the flex fatigue life of the polymer without lowering the glass transition temperature below about 140° C wherein the third epoxy resin is selected from the group consisting of an epoxidied phenolformaldehyde novolac having a weight per epoxide between about 172 and about 179 and a diglycidyl ether of bisphenol A having a weight per epoxide between about 600 and about 950;

b) incorporating an effective amount of a cationic photoinitiator comprising a triphenyl sulfonium compound, into the mixture, and

c) processing the resin mixture including the steps of 1) exposing at least a portion of the layer to a source of actinic radiation, 2) subjecting the exposed portion to heat to at least partially cure the exposed material, 3) removing unexposed material, 4) exposing the partially cured mixture to actinic radiation a second time, and 5) heating to fully cure the partially cured mixture to form the dielectric.